

## CTP Site Preparation Guide

- OpenRIP Symphony
- VM CTP System
- PlateRunner P24 Processor

### INTRODUCTION

Installation of your Xanté CTP system involves a certain degree of planning and site preparation. This guide will help you prepare for the arrival of your system, so that the installation goes as smoothly as possible. Many of the preparation tasks listed in these pages are mandatory — you will not have a functioning system at the end of the installation period if the preparation tasks have not been completed. In that case, it will be necessary to schedule additional time to finish the installation, and that additional time will be billed.

### SITE PREPARATION

The Xanté VM CTP system should be installed in a low traffic area which is free from excessive dust and other contaminants. The ambient temperature range should be between 65 and 78 degrees Fahrenheit (18 – 26 degrees Celsius) while the equipment is in operation. For the plate material you plan to use, note the acceptable range for developer temperature. If the ambient temperature where you are installing the equipment sometimes goes higher than the maximum developer temperature, it may be necessary to install a chiller on the processor. Both can be retrofitted in the field if necessary, but it is much easier to ship the processor with one installed. The chiller uses refrigerative cooling and does not require a water supply.

Humidity should be maintained between 45% and 65% non-condensing at all times. Failure to maintain sufficient humidity can cause static electricity buildup which can damage the equipment. The imaging laser is especially sensitive to static electricity. Humidity in excess of 60% to 65% may cause problems with photopolymer plate material. If any other plate or film processors are located nearby, ensure that they are properly vented. Buildup of fumes in the vicinity of the VM CTP System can cause premature degradation of the optics.

The drive system which transports the optics in the VM CTP System is sensitive to vibration. Vibration which occurs while imaging is underway may cause imaging anomalies. The best location for installing the system is on a cement floor, away from heavy machinery which can vibrate the floor. If the system will be installed on a raised floor, wooden floor, or upper floor in a building, then it should be located some distance away from walkways and other sources of vibration. The system should not be installed in a carpeted area, as carpets can produce a static charge that may damage the system.

### YELLOW SAFELIGHT, YELLOW ROOM

All violet-sensitive plate materials on the market at this time require special lighting conditions in order to avoid fogging (undesired exposure). It is necessary to control all the sources of light in the area around the platesetter and processor while

plates are being handled, both ambient light and direct light. Ambient light can be controlled by using a dedicated room, such as a darkroom, or by using curtains to create a “yellow room.” If you don’t presently have a darkroom, the latter choice is much less expensive. To order a yellow room kit, contact Dor-A-Mar at (631) 738-0457, and ask for one of the following Xanté yellow room kits (pricing subject to change). Kits are available to create 6’ x 9’ (1.8 x 2.7 m) and 8’ x 9’ (2.4 x 2.7 m) rooms. The 6’ x 9’ rooms contain a cutout in the curtain wall for the processor to exit the room, while the 8’ x 9’ rooms do not. All kits include curtains which are 9’ tall, ceiling tracks, valences, pressure-sensitive Velcro, and a 2’ x 2’ (60 x 60 cm) yellow window. Please ensure that the 9’ height is appropriate for your room, and discuss it with Dor-A-Mar if it is not. Allow 5 weeks for delivery.

“L” shaped (placement in a corner)	• 6’, 9’	\$735
	• 8’, 9’	\$765
“U” shaped (placement along a wall)	• 6’, 9’, 6’	\$965
	• 8’, 9’, 9’	\$1075
“U” shaped (placement along a wall)	• 9’, 6’, 9’	\$1095
	• 9’, 8’, 9’	\$1120
Rectangular (placement mid-room)	• 6’, 9’, 6’, 9’	\$1350
	• 9’, 8’, 9’, 8’	\$1465

Many regions have safety and building codes which are applicable to dark rooms, possibly including the “yellow rooms” which can be built with the kits listed above. It is your responsibility to understand and comply with those regulations.

To control direct light, it is necessary to filter all sources of light including lighting fixtures, windows and computer monitors. Materials for filtering light sources are available from EncapSulite International at (877) 227-8756, or (281) 239-0225, or [encapsulite.com](http://encapsulite.com). EncapSulite does not sell products to end users, but Xanté is a dealer for EncapSulite. You can contact Xanté at (251) 473-6502.

Different plate material types require different filters — please check the specifications for your plate material to see which type of light filter you need to order. Xanté plate material requires an A10ND.3 safelight, which provides a spectral limit of 580nm. All yellow safelight treatments must be in place prior to installation of your CTP system.

### ELECTRICAL REQUIREMENTS

Your CTP system will require two electrical circuits — one for the platesetter and computer and another for the processor. Both of these circuits should be used exclusively for the CTP equipment, and ideally, they should be a dedicated run from your main breaker panel. This is especially important if the circuits would otherwise be on a subpanel with printing equipment which creates line noise such as presses and large bindery equipment.

The CTP system and computer can operate from a single, dedicated circuit. In North America and other 120 volt markets, it should be a 120 volt, 15 amp circuit using a NEMA 5-15 outlet — this is a normal business/household outlet. In Europe and other 220-240 volt markets, the circuit should have 10 amps capacity, using the standard outlet type for the region.

The plate processor requires a 208-260 volt, 30 amp circuit. If the voltage is lower than 220 volts, it may take longer for the heaters to come up to temperature. If you install 208 volt service for the plate processor (from two legs of three phase service), it is especially important that the voltage does not sag substantially under load. To connect the processor to the outlet, we recommend a NEMA L6-30R twist-lock connector. You are responsible for both the circuit/outlet, and the matching plug; the processor does not ship with a plug connected to the line cord.

### **PLUMBING REQUIREMENTS**

The plate processor requires a cold water supply which can provide a pressure of at least 20 psi (130k Pa), and flow of 3.5 gpm (13 liters per minute). It takes approximately three gallons (11 liters) of water to process each plate. The water is supplied to the processor from a faucet with a normal garden hose connection. You should also provide a garden hose which is long enough to reach from the faucet to the processor.

The processor also requires a drain, which must be no more than 6 inches (15 cm) above the floor, or 24 inches (60 cm) below the processor, and no more than 4 feet (120 cm) away. Water is used for both the pre-wash and rinse stages, so the waste stream will contain some amount of chemicals which were part of the plate, and some developer chemistry. Consult the material safety data sheets for the plate material and chemicals you plan to use, and verify with your municipality that you are allowed to dispose of these chemicals in the drain. There can be serious personal and corporate penalties for disposing of chemicals in violation of local, state, or national laws. If you cannot place a drain close enough to the processor, then you may alternately allow the waste water to drain into a 5 gallon (20 liter) bucket, and use a sump pump to pump the water to a nearby drain. Be sure that the sump has higher than 5 gpm of capacity.

If it is not possible to provide a fresh water supply or drain for the processor, or if local regulations prevent draining the processor's wastewater into the sewer, the plate processor can be configured to recirculate water. We only recommend recirculation if there is no other way available to operate the processor — it is by far preferable to use fresh water and a drain. If you must use recirculation, it is best to equip the plate processor for it at the factory rather than modifying it on site. The recirculation option adds two pumps and two filters to the system. The filters are a maintenance item, and all water (6 gallons or 23 liters) must be replaced daily. Water which is replaced daily may have a higher concentration of contaminants than water which is continually replaced during normal operation of the machine using a fresh water supply.

You will need to supply two 5 gallon (20 liter) containers: one for the developer waste, and one for a gum recirculation container. For both of these containers, it is best if they have a small neck or are closed; this limits evaporation and odor, simplifies removal and transportation, and (for the gum reservoir) makes it less likely that the contents will be contaminated by airborne dust and other material.

### **NETWORKING REQUIREMENTS**

Install an Ethernet connection close to the CTP area, and ensure that it is working prior to the arrival of the installer. It should be accessible to the computers which comprise your prepress department so that they are able to print to the RIP — or if the RIP is in a separate location, so that the RIP can communicate with the computer which drives the VM CTP system. While a 10baseT (10 megabit) network will work, we recommend a 100baseT network at minimum. Some RIP systems are equipped with gigabit Ethernet connections, and gigabit switches have become inexpensive enough to merit serious consideration for a typical prepress department.

### **DESIGNING YOUR CTP WORKSPACE**

There are three components of the CTP system which should be in close proximity to one another: the computer which controls the VM CTP system, the VM CTP system itself, and the entry end of the plate processor. You should design your workspace so that these three areas are as close to one another as possible, so that plate handling can be performed with a minimum of movement. The VM CTP system plus stand are 46" wide by 25" deep (116 x 64 cm), and the plate processor is 36" wide by 96" long (91 x 255 cm) with the racks installed. Allow for 12" (45 cm) on both sides of the VM CTP system, and 4" (10cm) behind it. There should be 24" (60 cm) on both sides of the plate processor. There should be 24" (60 cm) of working space in front of the entrance to the plate processor, part of which is occupied by the entrance rack; the plate exit rack can be very close to a wall.

The computer which is controlling the VM CTP system does not need to be in the yellowroom with the VM CTP system, but it must be nearby because the VM CTP system is connected to the computer via a 15' (4.5 m) cable. If the computer which is controlling the VM CTP system is also the one which is running the RIP software, then there is a distinct disadvantage to having it in the yellowroom: you cannot proof on screen in full color, since the monitor must be covered by a yellow filter.

The computer does not ship with a table or stand — you must supply that. If you ordered the VM CTP system without the optional stand, then you should supply a sturdy table or cabinet without wheels which can support the full 180 lb. (80 kg.) weight of the VM CTP system. There should be a place on the floor under or directly behind the VM CTP system position where the vacuum pump can sit. The stand has two light safe drawers to be used for plate storage. If you did not order the stand, be sure that you have light-safe drawers nearby for plate storage.

## ANCILLARY PARTS AND SUPPLIES

Your equipment installer will be carrying a CCD dot meter to calibrate the system during installation. However, we strongly recommend that you have a CCD dot meter on hand if you ever need to recalibrate the system. Xanté sells a dot meter, but meters by other leading manufacturers should work as well. Note the difference between a densitometer (including “plate densitometers”) and a dot meter. Densitometers measure dot area by shining a light on a region of the media and measuring how much light is reflected. Dot area meters use a CCD array (as is found in digital cameras) attached to microscope optics to measure the size of halftone spots. While both types of devices can be very accurate, CCD dot meters provide better results in practice because calibration of the meter is much more simple.

Please have a box of appropriate plate material for each size of press for which you’re planning to produce plates. If you’re using Xanté plate material, the following sizes are stocked as standard items, and other sizes can be special-ordered:

Harmony 8 mil Violet Metal Plates

- 10" x 15" (254 x 381 mm)
- 11" x 18" (279 x 457 mm)
- 11.25" x 18.5" (286 x 470 mm)
- 12.0625" x 17.375" (306 x 441 mm)
- 13" x 19.15625" (330 x 487 mm)
- 13" x 19.375" (330 x 492 mm)
- 13.1875" x 19.09375" (335 x 485 mm)
- 13.375" x 19.875" (340 x 505 mm)
- 15.75" x 18.5" (400 x 470 mm)
- 15.75" x 20.0625" (400 x 510 mm)
- 15.75" x 20.125" (400 x 511 mm)
- 16" x 17.5" (406 x 445 mm)
- 18.0625" x 20.687" (459 x 525 mm)
- 19.6875" x 23" (500 x 584 mm)
- 19.875" x 22.75" (505 x 578 mm)
- 20.75" x 25.625" (527 x 676 mm)
- 21.6875" x 26.375" (550 x 670 mm)
- 22.5" x 28.5" (571.5 x 724 mm)
- 24.25" x 28.5" (616 x 724 mm)

Be sure to have the appropriate chemistry on hand for the plate material you have selected:

- Harmony Violet CTP Developer: Please have 5.2 gallons (20 liters) of the developer on hand.
- Harmony Violet CTP Replenisher: Most plate materials require a replenisher, which maintains the pH of the developer chemistry. If needed, please have 5.2 gallons (20 liters) on hand.
- Harmony Violet CTP Gum: Please have 2.6 gallons/10 liters of gum concentrate.

The best tool for monitoring plate processor chemistry is a pH meter, which is shipped with the P24 processor. It is also important to maintain proper temperature. To measure both, we recommend the Hanna Instruments pHep4 (HI 98127), along with the 7/10pH calibration kit (HI 770710P) to maintain calibration. For more information, visit the Hanna Instruments website at

<http://www.hannainst.com/products/prodline/tester.cfm>.  
They can be ordered from Professional Equipment at <http://www.professionalequipment.com>.

To calibrate the temperature of the processor, we recommend non-reversible temperature labels. These labels can be attached to plates (5 per plate), and will show the highest temperature which the plate reached, even after it has cooled down. Your installer will have enough for the installation, but they may come in handy later on for diagnostic purposes. They can be ordered from [xante.com](http://xante.com), [omega.com](http://omega.com) and [t-m-c.com](http://t-m-c.com). We recommend labels with a temperature range of 190-280 degrees Fahrenheit (90-135 degrees C), with 10 degree F resolution.

If any of the presses require plates to be punched, then you should have the appropriate punches on hand. Xanté sells plate punches for certain presses, and they are also typically available from the press manufacturer and third parties. The VM CTP system registers the image to the gripper edge and right edge of the plate. For best registration on press, the punch should also register to those edges. Centering punches can typically be modified to work that way, and your installer can assist you with making that change to your punch, if needed.

For evaluating dot size, quality, and exposure level, we recommend a 30x magnifier or loupe. A plate exposure scale will also be necessary to set laser power — consult the plate manufacturer for the appropriate one for the material. Xanté plate material requires a Stouffer 21 step wedge (step 3 solid, step 5 ghost) or a UGRA wedge (step 2 solid, 4 ghost).

## SYSTEM DELIVERY

The components of your CTP system will arrive from several different locations, typically over the course of a few days. The VM CTP system and the VM CTP system stand are typically shipped by truck freight from Xanté in Hauppauge, NY. The PlateRunner P24 processor with stand (3 crates total) is shipped by truck freight from Xanté in Mobile, AL. The RIP computer and scanner (if applicable) will ship from Xanté in Citrus Heights, CA. Other components ship from various locations. All components should be in place prior to the arrival of the installation crew, and Xanté tracks all shipments to ensure that they will arrive on time.

All crates should be moved to the area where the equipment will be installed. The following crates may require special consideration with respect to doorway dimensions and movement. Please ensure that there is a way to get each of these crates from the truck to the installation area:

	height	depth	width	weight
VM CTP System	33" (84cm)	28" (71cm)	52" (132cm)	334 lbs. (151kg)
VM CTP System Stand	31" (79cm)	38" (97cm)	53" (135cm)	285 lbs. (129kg)
P24 Processor	39" (100cm)	32" (82cm)	63" (160cm)	450lbs (204kg)

Please consider the following:

- If you do not have a loading dock, please contact Xanté to ensure that the crates arrive on a truck which is equipped with a lift-gate.
- Please ensure that all doors between the delivery point and the installation area are wide enough that the crates can pass through. If not, it may be necessary to unpack equipment and then move it to the final location.
- You should have a forklift, pallet jack, or several dollies available. If you are using dollies, you should have enough staff on hand to lift the crates onto the dollies.
- If the installation location is upstairs, and there is no elevator, or the elevator cannot accommodate the crates, then you may have to make special arrangements to put the equipment in place.
- Consider whether it is necessary to hire a rigging company to put the equipment in place, and set up the plate processor (as described below). If you do hire a rigging company, discuss with them whether it makes more sense to ship the equipment to your facility or theirs.
- For any equipment which you have unpacked, please retain the boxes or crates at least until the installation is complete. That will facilitate sending it back if damage is uncovered during the installation.
- Xanté installation crew members are not permitted to lift more than 80 lbs. (35 kg) without assistance.

## **P24 PLATE PROCESSOR**

It is the customer's responsibility to unpack and assemble the processor and stand in the final position prior to the arrival of the installation crew. Do not connect water or power to the processor. The stand is included in the crate with the processor. It typically requires four people, each capable of lifting 100 lbs. (45 kg), to assemble the processor.

## **VM CTP SYSTEM AND OPTIONAL STAND**

Please unpack the VM CTP System and (if applicable) its stand, and place the VM CTP System in the final position prior to the arrival of the installation crew. Do not connect power to the VM CTP System. We recommend using four people to lift the VM CTP System into position.

## **RIP AND OTHER COMPONENTS**

Please do not unpack any other components. If any components appear to have sustained damage during shipping, please contact the Xanté Sales Coordinator at (800) 926-8839 immediately. If it is necessary to uncrate equipment so that it will fit through a door, please advise Xanté before doing so.

## **STAFFING DURING THE INSTALLATION PERIOD**

It is sometimes necessary to deal with specific issues regarding the installation which might not have been anticipated prior to installation. Please ensure that a staff member is available during the installation who has authority to make decisions regarding the installation, or who can act as a liaison to management.

Training is a vital component of the equipment installation, Xanté's experience with previous installations has shown that the quality of the training period is the primary determinant of success or failure with a system. Please ensure that during the training period, the employees who will use the system can devote their attention exclusively to the training process, with minimal production-related interruptions. We encourage management to state explicitly to the applicable employees that training is the highest priority. Typically, two full work days are spent on training.

The CTP system acts as a bridge between the prepress and press departments, so members from both departments should be available for training. Graphics staff should have a thorough understanding.

## Customer Equipment Delivery Checkoff List

Please check off the following items when they have been completed. All should be complete prior to your equipment shipping.

- I will require carrier to deliver with lift gate and inside delivery (additional fee for this service).
- I have measured all doorways and other obstructions, and confirmed that all equipment will fit.
- I have a plan to move the equipment to its location.
- I have the staff to move, unpack, and place the equipment.
- I have designed a CTP workspace with the following characteristics:
  - The workspace is large enough to hold the computer, VM CTP system and plate processor.
  - The front of the VM CTP system and entry rack of the processor are immediately adjacent.
  - The computer and VM CTP system can be connected by a 15 foot cable.
  - I have a cart or table to hold the computer.
  - I ordered the VM CTP system stand or I have a strong table for the VM CTP system to support 334 lbs. (151kg), and light-safe storage for plates.
- List presses and press sizes used in shop.

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If all preparation steps are complete, please sign below, and fax to Xanté at (251) 473-6503.

I acknowledge that I have completed all the preparation steps outlined on page 9 of this document. I understand that when I return this form, Xanté Corporation will make arrangements for the shipment of my equipment.

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## Customer Responsibility Checkoff List

Please check off the following items when they have been completed. All should be complete prior to your scheduled installation date.

For users who will put the equipment in a darkroom:

- I have a darkroom with adequate space for the VM CTP System and P24 Processor.
- The darkroom does not contain photochemicals, or adequate venting will be used 24 hours/day.

For users who will put the equipment in a yellowroom:

- I have a space set aside for installation of a yellowroom (4 feet by 9 feet, minimum).
- I have ordered the materials necessary to create a yellowroom.
- I have installed the yellowroom.

I have ordered the appropriate color filters for the plate material I plan to use:

- All fluorescent light fixtures have tube sleeves or filters which cover the light.
- All windows within the plate handling area are blacked out, or covered with appropriate filter.
- Computer monitors and other light sources are covered with filters.

I have installed the appropriate circuit and cables I plan to use:

- I have installed a standard dedicated circuit for the computer and VM CTP system (15A/120V in North America, and other 120V areas).
- I have installed a 30A/208-260V dedicated circuit with a NEMA L6-30R connector.
- I have a NEMA L6-30R plug to be installed on the plate processor line cable.

For users who plan to provide plumbing for the plate processor:

- I have a cold water supply with a flow rate of 3.5 gallons per minute.
- I have consulted local and state regulations to ensure that I can dispose of waste water legally
- I have a drain installed no more than 6 inches above the ground.
- Or I have purchased a bucket, a sump, and enough tubing to reach a nearby drain.

For users who plan to recirculate water through the plate processor:

- I ordered the plate processor with the recirculation option.
- I have a plan for disposing of 6 gallons of waste water per day.
- I have installed a network connection to be used for the computer.
- I know the ambient temperature range where the equipment will be installed, and no cooling will be necessary for the developer
- Or I have ordered the plate processor chiller option.
- Humidity can be maintained between 45% and 65%, non condensing.
- I have selected an area which is relatively free of vibration for the installation (strongly recommended, not required).
- I have a CCD dot meter to calibrate the system.
- I have a box (or more) of plate material for each type of press I plan to use.
- I have 5.2 gallons/20 liters of Harmony Violet CTP developer which are compatible with my plate material.
- I have 5.2 gallons/20 liters of Harmony Violet CTP replenisher which are compatible with my plate material.
- I have 2.6 gallon/10 liters of gum concentrate.
- I have a pH meter and thermostat.
- I have a supply of non-reversible temperature labels, with a 190-280 degree Fahrenheit range.
- I have appropriate punches for the presses I use.
- I have a 30x magnifier or loupe (Strongly recommended, not required).
- I have a Stouffer 21 step wedge or a UGRA wedge.
- I or another party have unpacked and placed the plate processor in its final location.
- I or another party have unpacked and placed the VM CTP System in its final location.
- I have a staff member who will act as a liaison during installation.
- I have arranged for the appropriate staff to have two full, uninterrupted days of training.
- I have discussed responsibility for using and maintaining the equipment with my staff.

**Please check one of the statements below, sign this page, and fax pages 10 – 11 to the Sales Coordinator at (251) 473-6503.**

- If all preparation steps are complete: I acknowledge that I have completed all the preparation steps outlines on pages 10 and 11 of this document. I understand that when I return this form, Xanté Corporation will make travel arrangements for the installation. I understand that if I need to change the date of installation, I will incur all charges related to changes in travel arrangements.
- Or, if all preparation steps are not complete: I have read the preparation steps outlined in this document, and I understand that all preparation steps outlined on pages 10 – 11 must be completed by the time Xanté installers arrive to set up the CTP system. I understand that when I return this form, Xanté Corporation will make travel arrangements for the installation. I understand that if I need to change the date of installation, I will incur all charges related to changes in travel arrangements. Furthermore, I understand the date of installation, I will incur all charges related to changes in travel arrangements. Furthermore, I understand that if the installation cannot be completed for any reason beyond Xanté's control, that I will incur the full cost of booking additional installation time. Finally, I understand that the scheduling of supplemental installation work is subject to availability of installation staff.

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date